may—june, 1970

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LOUISIANA conservationist

comments

Clark M. Hoffpauer, Director

A time to rend, and a time to sew; a time to keep silent, and a time to speak,

Ecclesiastes

It is highly doubtful that in any gathering of hunters discussing past hunting seasons and bag limits there would be any unanimity of satisfaction in the group. With the single exception of waterfowl, it is possible that a group of hunters might agree on the bag and possession limits of game birds and animals.

Actual selection of the dates for hunting seasons within the allowed frameworks often draws the fire of some sportsmen. This is particularly true of the deer and duck seasons. The Commission has always tried to please the greatest number of hunters in the state in fixing seasons. It is impossible to please everyone. Those who are not satisfied become extremely vocal.

In keeping with a policy that was established more than a decade ago, hunters, sportsmen's clubs, police jury members, legislators, and representatives of organized conservation groups, have the opportunity to speak freely and in detail to members of the Commission regarding the setting of seasons and bag limits.

I am referring to the public hearings on seasons and bag limits that are scheduled to be held in Alexandria June 19 and 20, at the Ramada Inn.

This is a public forum where anyone who wishes to express his opinion on hunting seasons and bag limits will be heard by the Commission. His statement will also be tape recorded, and the full transcript of the hearing will be carefully reviewed by members of the Commission before actual seasons and bag limits are fixed.

Alexandria is the site of the public hearings because it is centrally located, providing a convenient location for persons from other sections of Louisiana to gather and to be heard. The two-day public meeting is designed to include a Saturday, in order that persons who might not be able to get away from their work on Friday can do so on Saturday and let their sentiments be known.

We feel that this annual two-day public hearing is the place for sportsmen to sound off and make their individual or collective views known to the Commission. To forego this opportunity to be heard can only detract from expressions of discontent after seasons have been established.

It should be pointed out that the Commission also consults with its biologists at length before final action is taken on definite seasons for hunting. Recommendations of biologists are considered along with the recommendations and sentiments expressed by those who attend the public hearings.

The end result are hunting seasons that please the majority of hunters in the state. That is the prime objective of the Commission when it exercises its authority to fix hunting season dates . . . providing the maximum hunting opportunity and best possible bag for the greatest number of hunters.

This is not easy to do. Because of diversified terrain and the natural influence of weather on some species of game birds such as doves, waterfowl and woodcock, seasons sometimes open at unseasonable times of the year.

These should rightfully be called bad breaks. They cannot be anticipated in advance. Hunting regulations necessarily must be fixed well in advance, to allow time for printing of regulations. In the case of the migratory game birds, seasons must be established early in compliance with federal regulations.

In conclusion, I would like to stress that the public hearings scheduled for June 19 and 20 represent a time for sportsmen to be heard. Those who do not take the trouble to attend or send a representative should keep in mind they have passed up the opportunity to speak and to be listened to.

LOUISIANA conservationist

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Commission, 400 Royal Street,
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CLARK M. HOFFPAUER, *Director*

R. K. YANCEY, *Asst. Director*

L. S. ST. AMANT, *Asst. Director*

SAM MURRAY, *Executive Assistant*

TED O'NEIL, *Chief, Fur Division*

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from waste the natural
resources of my country—its soil
and minerals, its forests, waters
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McFADDEN DUFFY ____ *Editor*
BOB DENNIE ____ *Photojournalist*
LYN JOHNSON ____ *Staff Writer*
JAY DROTT ____ *Staff Writer*
All photography not otherwise credited, by
BOB DENNIE
KATHLEEN NORRIS ____ *Art and Design*
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Story and Photography
By Lyn Johnson

THE GOLDEN DAWN

It is the dawn . . . a smog-filled dawn that hides the sun . . . a gray, polluted dawn that illuminates the coming destruction of wildlife and man's own environment.

Yet, in the middle of this ecological crisis, there is one rare and special place where a golden dawn floods the day, where wildlife and man's million-dollar industries live together in harmony.

The place is Avery Island—where majestic cypress and oak trees draped with Spanish moss greet the golden dawn; where whitetail deer feed in lush, green meadows only a few feet from oil wells; where thousands of egrets nest across the road from a pepper sauce factory; where alligators glide down bayous near a salt mine.

With national emphasis on clean environment, Avery Island is a living example of how man can live and operate his industries without disturbing the ecological balance. Maintaining this delicate balance of industry and nature takes a lot of careful planning, but Avery Island proves that it can be done, that environmental ravishment is not essential to progress.

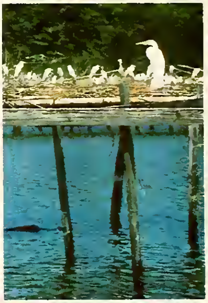
The history of Avery Island is that of progress closely linked with conservation. To begin with, Avery Island is not an island at all, but a huge salt dome protruding 152 feet out of southwest Louisiana's swamplands. The island's 2500 acres, located at Vermillion Bay on the Gulf of Mexico, are surrounded by marshes and Petit Anse Bayou on three sides and by a cypress swamp on the fourth.

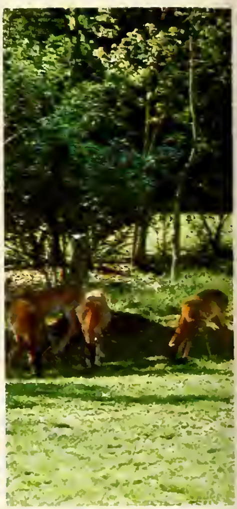
History begins with recent discoveries of pottery and basketwork found next to the salt that indicate use of a salt spring on the island by Indians some two thousand years ago. Later, in 1790, a small boy found the salty spring while deer hunting on the then-named Petit Anse Island. It became his tiresome chore to carry home buckets of the brine to boil down. During the war of 1812, John Marsh of New Jersey erected a salt evaporating plant on the spring. Decades later, during the Civil War, Marsh's son-in-law Judge Daniel D. Avery, resumed the evaporation operation. Expansion attempts brought the discovery of a plug of pure rock salt 13 feet beneath the spring. The country's first salt mine on Avery Island became important to the Confederate government and was brought to an abrupt halt by Federal forces. Commercial operations were picked up in 1899 by International Salt Company which has mined millions of tons of the 99 percent pure sodium chloride from the five-mile deep deposit.

Looking across a placid salt-water pond at the refinery, it is hard to imagine that beneath the fertile earth is an expansive network of rooms, some with cathedral-high ceilings, that checkerboard the island's insides.

With the salt came the pepper, and another colorful story.

Years after the Mexican War of 1848, an American soldier known now only as Gleason returned from sunny Mexico to his native New Orleans where he met an old acquaintance, Edmund McIlhenny, son-in-law of Daniel Avery. Before leaving, Gleason gave McIlhenny a handful of dried pepper pods from southern





Mexico and said, "You will find that these will add exceptional flavor to your food." The advice was true, and McIlhenny planted some seeds in a garden on Avery Island.

After escaping advancing Federal forces in the Civil War, the McIlhennys returned to Avery Island to find the pepper plants thriving. One of McIlhenny's culinary experiments resulted in an unusual red pepper sauce which was tasted enthusiastically by a New York wholesale grocer, who asked for regular shipments. That was in 1868 when the name Tabasco was born, an Indian word meaning "land where the soil is humid." In this humid soil of Avery Island, pepper seedlings are transplanted each spring from greenhouses to the eastern slopes of the island where the pods transform colorfully from green to yellow to fiery red at summer's harvest.

In the vine-covered factory, just across the road from an egret sanctuary, the peppers are ground into mash and steeped in their own juices in large oak casks. A wooden cover with tiny holes in it covers the barrel. A thick layer of salt, from the Avery mine, seals the mash, allowing the natural vapors of fermentation to escape and prevents fresh air from entering the barrel. After three slow years of fermentation, vinegar is added to the mash, the contents are filtered, then bottled in the green-necked bottles.

Development of the most recent industry, oil, began with unsuccessful explorations first in 1898 and later in the 1920's and 1930's. The first producing well was drilled to a depth of 9,242 feet in 1942 by Humble Oil & Refining Company. Today, Humble has completed 127 wells, of which 76 wells are producers. Last year, these wells brought in about 2,800,000 barrels of the black gold.

Most of the wells are located in the bayous and channels surrounding the island, hidden from view of the casual visitor. However, many of the wells are sprinkled all over the island, on meadows and near the marshes. Black pipes protruding from the lush greenery are topped with a "Christmas tree" of valves and surrounded by a guard rail. The operations are clean, because careful and attentive management has assured this. Underground pipes from all the wells move the oil and gas to a compressor plant, a field extraction unit that dries the gas and oil storage tanks. These shining steel installations are neatly tucked away among the moss-draped oak trees.

It's a common sight to see herds of whitetail deer grazing no more than a few feet from the oil production facilities. About 700 deer make their homes on Avery Island and the surrounding marshlands. No one has told them that there is an environmental crisis. On Avery Island, industry and wildlife get along famously.

This was the dream of Edward Avery McIlhenny, son of Edmund McIlhenny. A world traveler, conservationist, explorer, writer, sportsman and naturalist, Edward McIlhenny planned and developed Bird City and the Jungle Gardens on Avery Island so that everyone could see every type of native Louisiana wildlife and some colorful exotic species, as well as beautiful

plants and flowers—some brought from far corners of the world.

Bird City was founded in 1892 when Edward McIlhenny could see the coming demise of the snowy egrets and other marshland birds. Beautiful nuptial plumes on the back, head and neck of the egrets were valuable prizes sought mercilessly by hunters to sell for women's hats. Legislation was slow in coming, not arriving until 1909 with the Lacey Act, so McIlhenny decided to do something on his own. Capturing seven snowy egrets from the swamps, McIlhenny kept them in a large, flying-size cage until the next migratory season when the birds flew to their winter homes in South America. He thought the experiment had failed until the next spring when the egrets and their young came winging back to Avery Island, their new home.

Today the population of Bird City has exploded to more than 100,000 during the nesting season. The McIlhenny family has helped nature out by building long, bamboo platforms several feet above an artificial lake. The egrets—American, snowy and cattle—build their nests on the platforms and in the buttonwood trees and bamboo stalks surrounding the water. They have been joined by families of Louisiana heron, gallinules, ibises and other waterfowl.

At dusk, the sky is covered with the shadows of wings as the birds return from a day's foraging to their sanctuary, only a couple of hundred yards away from the Tabasco factory, forty feet from a railroad track that carries trainloads of salt from the mine, and only inches from a paved road where trucks carrying oil-well equipment travel.

Regular travelers on the road is the human population of Avery Island which numbers about 500, mostly workers at the salt mine and Tabasco factory. Other travelers come from all over the country to see Bird City and the Jungle Gardens where 30,000 azalea bushes flood the island with brilliant pink and white blossoms. There are rare orchids from the Pacific islands growing along the winding footpaths. There are lotus and papyrus plants from the upper Nile, red daisies from Africa, iris from the Netherlands and Japan, a forest of bamboo from China and 600 varieties of camellias. The most exotic attraction is a stately Buddha, which dates back to about 1100, seated peacefully within a pagoda keeping a silent sentinel over the balance of nature.

The balance is healthy. Alligators, nutria, muskrat, raccoons and fish make the marshes their homes. As well as the native species of marsh birds, the McIlhenny family descendants have transplanted exotic species such as the brightly-colored red jungle fowl and the Canadian goose. But human interference with the balance of nature is at a scant minimum.

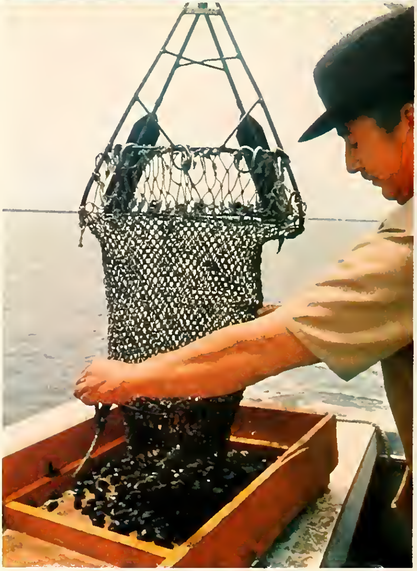
Wildlife cycles will continue within the scheme of nature. Man will continue to live and profit from his industries. Many parts of the country will face the dawning of an ecological crisis, but on Avery Island, man, industry, and wildlife will live together in a clean environment and the golden dawn.

By Johnnie W. Tarver

A new project entitled "A study of the clam *Rangia cuneata* in Lake Pontchartrain and Lake Maurepas, Louisiana" was fully implemented in July of 1969. This research project, 61-30-291R, is funded by the state (25 percent) and federal government (75 percent). The brackish water clam, *Rangia cuneata,* is a common inhabitant of the estuaries of the Gulf Coast. The common *Rangia* is a commercially important species in several of the Gulf Coast States and contributes substantially to the states' economy.

In Louisiana, severance taxes and royalties collected from the commercial harvest amounts to approximately 1 to 1.5 million dollars annually, of which the Louisiana Wild Life and Fisheries Commission receives 1 million. This money is used in the operation of the Oyster Division essentially for research, development, and management.

Dredging in Lake Pontchartrain was begun in the middle 1930's when it was discovered that large quantities of *Rangia* shell could be removed with sweeper dredges. Clam shell



Rangia clams are sampled regularly in many sites ... Sampling gear includes a modified 18-inch oyster dredge ...

Live and dead clams are dredged up in samples.

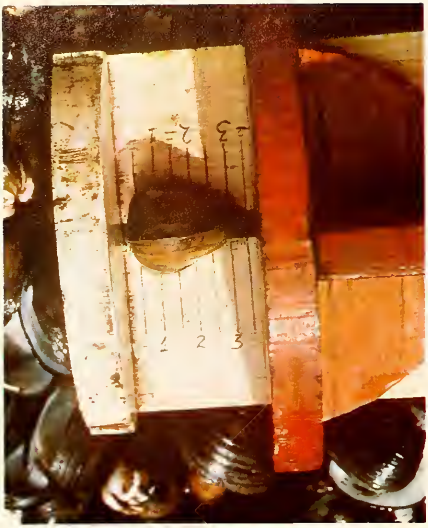
production was gradually increased over the years to the point where they are currently being removed from Lakes Maurepas and Pontchartrain at the rate of 5,000,000 cubic yards annually valued over $12,000,000.

Clam shells are used in general construction, road construction, the production of cement and lime, in the petroleum and chemical industries, and in poultry and livestock feed. The living clams are a source of nutrition for many aquatic species, such as the Atlantic croaker, spot, black drum, freshwater drum, catfish, blue crab, and white shrimp.

The objectives of this project, concerned with certain biological and ecological aspects of the *Rangia*, are: (1) to determine the clam shell stocks and the rate of replenishment of clam shell being harvested, (2) to determine the factors affecting the distribution, density, growth and reproduction of the clam in Lake Pontchartrain and Lake Maurepas, Louisiana, and (3) to evaluate the effects of harvesting methods on the environment.

It is necessary that we learn more about these factors in order that we may best utilize

THE CLAM STORY



this important resource and establish needed management procedures through wise regulations. This information would be extremely valuable to other states having a clam shell industry.

To sample the population of *Rangia*, two sampling techniques are utilized: benthic and planktonic. Bottom samples are taken with a modified oyster dredge and a Peterson dredge throughout Lake Pontchartrain and Maurepas and their major tributaries to determine the distribution and density of the clam population.

Fifteen selected areas are sampled on a monthly basis to determine growth rate, recruitment, and shell production. Depth, bottom type, salinity, temperature, and turbidity are recorded with each sample.

Clams are counted and measured . . . Suction dredges are often seen in Lake Pontchartrain . . . Shells are transported from the lakes to port by barge.

Growth rates are determined by measuring the clams and marking numerals on the clam shell with a high speed drill. The clams are then placed in selected locations, sampled periodically and remeasured. Observations on spawning conditions, parasities, and overall condition of the clams are made on a monthly basis. Plankton samples are made periodically to determine spawning success and larval dispersion.

In addition to this sampling program, project personnel have contacted and plan to work closely with industrial representatives to determine what effects hydraulic dredges might have on the habitat. Samples are taken prior to and after industrial dredging operations. Periodic samples of the dredged materials are made to determine composition of the shell being dredged. The Louisiana Shell Producers Association which includes representatives of Ayers Materials, Inc., Jahncke Service, Inc., Louisiana Materials, Inc. and Radcliff Materials, Inc., have demonstrated a strong interest in the clam project and have offered their services whenever necessary.

Stock piles of *Rangia* shell are a common sight along the Louisiana coast.

Rangia shell is used extensively in road construction.

Among salt water game fish available to south Louisiana sportsmen, the drum suffers (or enjoys) an ambiguous reputation. By no means a "trash fish," it is still rather seldom that it is purposely sought by sport fishermen. The feeling toward drum seems to be this: If there are more noble fish in the area, go after them. If not, well . . . the drum is better than nothing.

The drum is plebian almost to the point of being comical. The flesh, under the proper circumstances, can be quite tasty. Still, epicures will not slash their wrists if they can't get it. The taste of the larger drums, over 15 pounds or so, is very poor. Also, at certain times of the year, the fish is plagued with tiny, slender parasites which, while harmless, do nothing to stimulate the appetite.

Esthetically, the drum is also found wanting: a homely, humpbacked fish, colored from dull black to silver-gray and with a gray-white belly. The mouth is only medium sized, toothless, and has barbels or whiskers extending from the lower jaw. The young drum are identified by four or five heavy, dark vertical bands which vanish as the fish ages. The fish derives its popular name from the sound it makes when landed: an unmistakable "thump," loud and clear.

When hooked, the drum stages an adequate fight, powerful and determined, but not overly entertaining. Inland, his prime tactic is a charge for deeper water; in the surf, he makes for the safety of the open sea.

Hooking a drum is not the explosive, dramatic catch it is with the popular game fish, such as bass and trout. Tending to be a nibbler, the drum is not crafty enough to avoid being hooked. Rather, hooking a drum is relatively easy. Neither is the drum noted for its ability to escape, once hooked. It does not have the heart-breaking habit of twisting loose just as it is about to be landed.

In Louisiana, the spring months are generally best for drum. The drum avoids the deeper offshore waters, although surf fishing can be excellent from spring through summer. In south Louisiana, the drum frequents the lakes, inlets, ponds and coastal river mouths. He also feeds heavily around man-made structures, such as pilings, bridges and docks.

Average size for drum is about three to six pounds. However, much larger sizes are not rare. In south Louisiana, a drum of 50 pounds will not cause the schools to close or the church bells to ring. Recently, I saw an enormous drum, possibly 40 pounds or more, blithely discarded after it had been weighed for a competition.

The drum is a bottom feeder exclusively, and live bait, such as shrimp and crabs, yield the best results, although some use a combination of live and artificial baits. A heavy nylon or wire leader is recommended, with hook sizes of 1/10 to 3/0 recommended for the smaller drum and 4/0 to 10/0 recommended for the larger. Hook size is rather crucial. A hook which is too small will be inadequate for the bait, and a hook which is too large will not fit the mouth.

There seems to be nothing doctrinal about the matter of bait. Only a few weeks ago, I used the eye of a small drum as bait to hook a larger one. The sport fisherman can often use the cannibal tendencies of fish to his advantage.

Fairly heavy equipment is generally recommended for taking drum. For the inexperienced, 35 to 45 pound test line is suggested, and at least 250 yards. For experts, 15 to 20 pound line is suggested, and a length of 200 yards is recommended. However, these suggestions are possibly more theoretical than not, and assume the worst.

A drum is best hooked with an even pull rather than a sudden motion. It is important to play the line so that the fish is unable to make a direct plunge toward the bottom, a move which could undo the angler.

In regards to habitat, the drum ranges along the Atlantic coast from Long Island down to the Florida Keys, and along the Gulf coast down to the waters of Mexico.

Drum are as unpredictable as any fish. The author and his brother recently made a trip to the marshes of Terrebonne Parish to try their luck in one of the innumerable ponds which dot the southern most part of the state. We got a late start, and it was not until about 1 P.M. that the lines were in the water. Although the weather was amenable to humans, there was serious doubt as to how the fish would react.

The sky was clear, almost cloud-

WHY BEAT THE DRUM?

Story and Photography
By Jay Drott

less, and the temperature was high. However, there was a very heavy wind from the water. In a way, this was good, as it restrained the gnats and mosquitoes which would have made us miserable. But, again it made the water very choppy and soiled, nor did it make casting any easier.

For about three quarters of an hour, there was hardly a nibble, but then things begin to happen. The drum began to hit, and their action seemed to be a signal for the festivities to begin.

The biting was not rapid, but it was fast enough to keep things interesting. Between us, there were no complaints. A number of satisfactory drum were taken, not trophy-winners, by any means, but younger fish in the four pound category. Several fine specimens of other types of fish were also landed, but that's another story.

Then, abruptly, all activity ceased. Nothing. It was as though someone had blown a whistle. There had been approximately two hours of successful fishing before the end. We waited for an hour or so in the hopes that fishing might pick up but about 4 P.M. it was decided to give it up, and it was getting late and would be dark soon.

All in all, a thoroughly satisfying trip. Of course, once home, the drum were consigned to limbo as we concentrated on lying about our reds and specks. Still, although the drum did not contribute significantly to our prestige, they were a factor in making the trip as enjoyable as it was. If a man were sarcastic, he might say, in their defense, that the drum give one something to do while waiting for the real fish to bite.

PURPLE GALLINULE

By Charles R. Shaw

Porphyrula martinica

There are several game birds in Louisiana which are virtually unknown to the majority of the residents of the state although there is an open hunting season on them each year. The Purple Gallinule, or "blue peter" as it is known in some areas of the state, is undoubtedly the most colorful of this group. Along with the Common Gallinule (often called the "Florida" Gallinule) and the coot, this bird belongs to the rail family.

Four other members, the King, Clapper, Virginia and Sora Rails are also considered excellent game birds although not yet appreciated to any great extent by our local sportsmen.

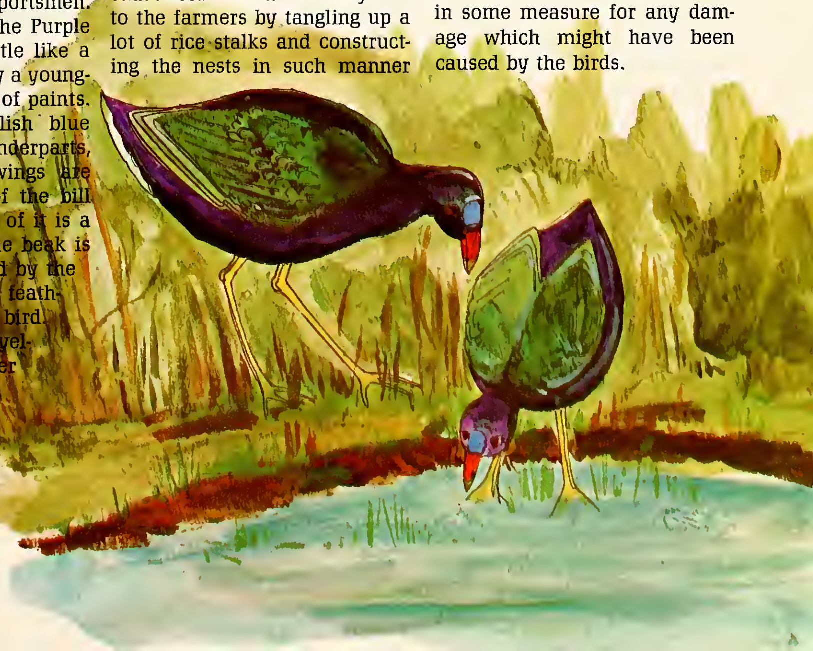
The description of the Purple Gallinule sounds a little like a job of coloring done by a youngster with his first box of paints. The basic rich purplish blue covers the head and underparts, and the back and wings are olive-green. The tip of the bill is yellow but the rest of it is a deep red. Just over the beak is the blue shield formed by the bare blue skin of the featherless forehead of the bird. The feet and legs are yellow. The feathers under the tail are white and show as a conspicuous flash of color as the bird jerks its tail forward over its back at each step. The feet are large in proportion to the size of the bird and the long slender toes enable it to walk easily on lily pads and similar floating vegetation in its favorite habitat of marsh, bayou, ponds, rice fields, lake shores, etc.

The Purple Gallinules are summer residents and generally are all gone by the end of October, which explains the necessity for the very early hunting season on gallinules. Along with many other species of birds they winter in tropical areas, presumably crossing the Gulf of Mexico.

Spring migration into Louisiana begins in late March or early April and the birds scatter out looking for likely nesting areas. The most commonly found nests are in the rice fields of south Louisiana where they cause considerable annoyance to the farmers by tangling up a lot of rice stalks and constructing the nests in such manner that they sometimes clog the rice harvesting machines. This practice is the most damaging habit which they exhibit.

The six or eight buff colored eggs are covered with small brownish spots and surprisingly enough hatch out into jet black downy young. The latter are able to fend for themselves about as well as baby chickens and are looked after by their mother in much the same manner.

The rice harvest may also include a gallinule harvest on occasion because sometimes the machines work around the edges of a field and keep working toward the center, thereby concentrating the birds. When the cover is finally about gone the gallinules are forced to fly and thus expose themselves to the waiting gunners. The sport, and food, thus obtained might be said to compensate at least in some measure for any damage which might have been caused by the birds.



timeless

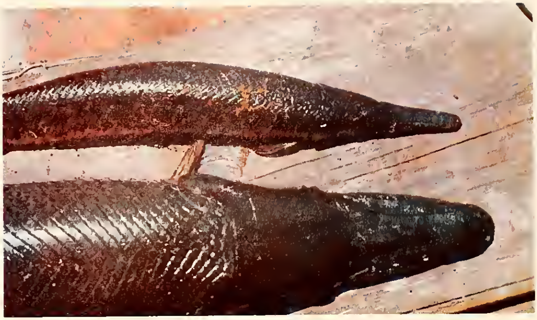
It is doubtful if anyone ever feels any tinge of conscience when he kills a garfish. The gar (from the Old English word meaning "sword") is unquestionably the most soundly hated fresh water fish in the state. Not only are his features of such a nature to set every man's hand against him, but, moreover, he has acquired an exaggerated reputation as a predator of game fish and a possible threat to human safety as well. ☐ Consequently, the gar endures an open season in Louisiana, with some persons hunting him commercially, but others hunting him for the pristine excitement of the kill, in the belief that they are helping to rid the waters of a noxious trash fish. ☐ But to what extent is the gar a threat to man and game animals? Data are incomplete, but evidence tends toward the conclusion that the gar is vastly overrated as a predator. Fishermen have been bitten by the gars in the course of landing them, but many more have been injured by catfish. There is no record of anyone's having been attacked by a gar. ☐ If, then, the gar poses very little actual danger to man, to what extent is he detrimental to game fish and birds in Louisiana. Studies by biologists indicate that game animals comprise only a small part of the gar's normal diet. In the brackish waters of the state,

PROWLER

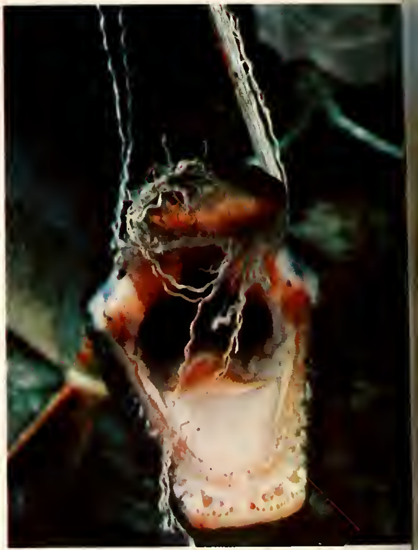
Baited wire noose can be fished with rod and reel or fixed to limb of overhanging tree. Some gar fishermen affix nooses to plastic jugs.

BY JAY DROTT

where the alligator gar seems to be most abundant, it was found to feed almost exclusively upon the blue crab. □ A study undertaken some years ago by Victor W. Lambou for the Wild Life and Fisheries Commission indicates that the gar feeds on the larger crabs, leaving the smaller for the fish. This arrangement, Lambou concluded, may ultimately be beneficial to the fish. By consuming the larger crabs, the gar indirectly creates more food for the smaller, thereby augmenting the number of prey for the fish. The crab supply is not significantly affected, Lambou reasoned, since they do not spawn in the brackish waters. □ Although not exclusively a scavenger, the gar is not fastidious about his diet and will seemingly eat anything, living or dead. When refuse is plentiful, the gar will feed almost exclusively upon it. Essentially, the gar's diet is primarily a question of expediency. J. R. Norman, in his *History of Fishes,* describes a gar at "hunting": 'Placing itself in a suitable position, and carefully sighting its victim, the gar gives a sudden, convulsive, sideways jerk of its head, at the same time endeavoring to grip the prey between its jaws. Many preliminary maneuvers and tentative snaps are made before the body of the little fish is finally transfixed by the teeth. When this is accomplished the victim is gradually worked round into a convenient position, and unless it has again escaped during this process, is finally swallowed . . .' □ If the foregoing is accurate, then the gar is hardly the most efficient predator in the animal kingdom. Any wonder he elects to take his groceries as they come? □ The gar is considered a fresh water fish, but he thrives quite well in brackish and salt water. Furthermore, he en-



joys distinct biological advantages over most fish. The gar is equipped with an accessory organ called a swimbladder, which acts as a crude type of lung. When the oxygen content of the water drops to a level insufficient to sustain ordinary fish, the gar can rise to the surface and swallow air. This adaptability is singularly evident during the summer months, when there is less dissolved air in the water. At such times, the gars seem to be more numerous and more active, although the fact is that the same gars are constantly re-surfacing for air. □ Primarily a tropical animal, the gar is most plentiful in the sluggish waters of the South, Mexico, Central Mexico and the West Indies. However, two species occur in the Great Lakes and one in Ontario. □ Gars in the South spawn in March or April, the female depositing the eggs in the bottom vegetation of shallow waters. The eggs are left unattended, and the young have to fend for themselves. The females usually grow to be larger than the males. □ When one speaks of gar in Louisiana, he is generally referring to the familiar alligator gar, one of the more prominent native fish, especially in brackish water. He is unmistakable, deriving his popular name from the long, flat, tapering jaws, quite similar in appearance to those of the alligator. Then there is his size. Although the smaller species of gar seldom exceed three feet in length, the alligator gar can easily reach a length of five to six feet, with one authenticated case of a female taken in Vermilion Parish and which measured 9.8 feet and weighed 302 pounds. □ The various species of gar bear a rather precise family resemblance to each other, varying chiefly in size and coloration. All are charac-



Four species of gar are found in Louisiana—top fish is the spotted Gar—below is common Alligator Gar. There are five species in the United States.

One of the more interesting devices used against the Gar is a sort of tassel attached to a line. No hook or bait is used . . . when the Gar strikes the lure, his teeth become entangled in the strands...

terized by a long, tubular body, tooth-filled snout-like mouth, rounded tail and hard, diamond-shaped scales. In the alligator gar, the coloration tends to a dark brown. □ Of the five species of American gar, four are found in Louisiana: the alligator gar, the longnose gar (second in size to the alligator), the spotted gar and the shortnose gar. The fifth species, the Florida gar, inhabits the Atlantic coastal streams of Florida and Georgia and is not found in Louisiana. □ Scientists once formulated the theory, citing the rhineoceros as example, that any animal which is heavily armored is headed for extinction. If so, no one thought to inform the gar, who continues to thrive unmindful of his impending demise. True enough, he has vanished from the waters of Europe and Asia, where he lived eons ago. But in the Southern United States, he is healthy and content, even if he does have only a few million more years to live, barring, of course, any interference on the part of man. □ It is impossible to catalogue animals precisely in any geological arrangement, of course, but most scientists believe that the gar evolved during the Cretaceous period, approximately 60 to 120 million years ago. Primitive man, conversely, did not appear until approximately one million years ago. Therefore, not only does the gar antedate man by an overwhelming antiquity, but he also has a cosmic seniority over the modern mammals, and even the Alps Mountains. □ Economically, the gar's status is tenuous. At one time there was a healthy market for the flesh and a few artisans used the scales for a costume jewelry. (The scales of the gar interlock, more like those of a reptile, rather than overlap, like

those of a fish). Now, however, sales are rapidly declining. In 1966, garfish sales in Louisiana totaled $88,037, according to the U. S. Bureau of Commercial Fisheries. But by 1967, the income had dropped to $67,586, and in 1968, the latest available tabulation, sales had slumped to $49,612. ☐ The problem seems to be primarily one of succession. The value of the fish is dependent upon it being delivered to the wholesaler dressed, in which state it brings from 15 to 20 cents wholesale and from 25 to 30 cents retail. However, say the wholesalers, the old-time garfishers are declining, leaving the field to the next generation, which, for one reason or another, is unwilling to dress the fish as required. Consequently, the wholesalers charge, although there is a robust demand for garfish, they are unable to meet it because the basic source is diminished. ☐ The commercial position of the gar can be illustrated best by a comparison with other commercial fishing in Louisiana for 1968: Shrimp, $24,480,750; Menhaden, $7,739,602; Oysters, $4,103,238; Catfish and Bullheads, $1,213,633; Crawfish, $993,341; Crabs, $552,869; Garfish, $49,612. ☐ There have been a number of attempts to plump for the gar as a game animal. The ultimate success of such efforts is questionable. The annual garfish rodeo which had been held in Lafitte, Louisiana, has been cancelled for this year because of a lack of response on the part of sport fishermen, according to its sponsors. ☐ Patently, in attempting to represent the gar as an exciting game animal, one fetches up against some very real psychological reefs. Face it, landing a gar

Gar sales are rapidly declining. In 1966, Garfish sales in the state totaled $88,037. By 1968, sales had slumped to $49,612.

simply does not engender the frisson necessary to a sportsman seeking the thrill of the chase. ☐ The gar is not fearsome, like the bear or the lion; not elusive like the mountain goat or the wild turkey; not sleek and crafty like the trout or the bass. The alligator gar, to be sure, has a reputation as something of a fighter, but considering his size, it is not terribly impressive Moreover, it is doubtful if a sportsman would care to have a gar mounted for display in his home. ☐ As a game animal, then, the gar makes a rather poor showing. He is too easy to find because of his habit of drifting near the surface of the water, and, once found, he can be caught with scarcely more trouble than swiping a bun from a buffet table. ☐ A wide spectrum of devices has been used in hunting the gar. Professionals use nets which they set out at night and gather in the morning, the gar being a nocturnal feeder. He can also be caught with a hook, like any other fish. At other times he has been hunted with firearms, arrows, spear guns and snares. Once, in North Carolina, he was even blasted with explosives during an experiment in gar control. ☐ One of the more interesting devices used against the gar is a sort of tassel attached to a line. No hook or bait is used. According to the theory, when the gar strikes the lure, his teeth, which are quite small, become entangled in the strands, and the fish can then be landed. We are told this device actually works. ☐ This, then, is the gar, hated holdover from a dim past. His adaptability allowed him to survive millions of years of geological and evolutionary chaos. He may even witness the eclipse of man.

A VANISHING HERITAGE

STORY AND PHOTOGRAPHY
BY BOB DENNIE

Louisiana has a number of rivers and streams, still relatively wild, untamed and partially unspoiled. Some are certainly no more than slim threads of nature, winding their way through the countryside. But they are alive and are our heritage and we must save them for tomorrow's children.

We, in our harried race to the moon, must pause long enough to make provisions for the earth and water.

With these thoughts in mind the Louisiana Wild Life and Fisheries Commission has started an all-out campaign to save our beautiful natural streams. Diminishing water habitat over the state prompted them to adopt a resolution endorsing the concept of preservation and urging the Legislature to consider some 37 streams in this program.

A bill that would create a Louisiana Natural and Scenic Rivers System has been introduced into the Legislature. This would prevent the alteration of the streams by clearing, channel realignment, snagging and channelization which is planned in a number of cases as means of "improvement."

Traveling and fishing most of these streams and rivers is not easy as there are many obstacles to maneuver over, under and around. However, these toils are soon forgotten as you hurriedly cast your favorite lure under the overhanging brush or next to that partially submerged log, into that darker, deeper water . . . or as your eyes frantically search the stream's surface for just the right spot for that next cast, while your partner carefully steers the canoe down the swiftly flowing water . . . or as you ease your boat up onto a clean, white sand bar to pause long enough for lunch or a cool refreshing swim. These obstacles are in essence a part of the personality of these waters and must remain as they provide the fish with protective cover from predators and other dangers.

Studies in North Carolina showed that dredging and removal of all cover from natural streams reduced the fish population by an unbelievable 90 percent and even after 40 years there was no significant return to the original population. Mississippi researchers found an average of 243 pounds of fish per acre in the Tippah River before it was dredged. Three years after channelization, samples revealed only 4.7 pounds of fish per acre and almost all of this weight was made up of shiners, minnows and darters.

Beautiful sand beaches on rivers such as the Tangipahoa are ideal for swimming, sun bathing and camping for the whole family. Swimming is the largest recreational use provided by these rivers next to fishing.

We have enjoyed wild rivers and streams as have our forefathers for generations. We can recall their coolness on the bare legs of our childhood. Certainly our descendants deserve the same opportunity to know them as we have. But we must act now if we are to save them.

The flow of these waters cannot be measured in terms of dollars. Measure it rather in their music, in the leap of a fish, the beat of a heron's wing, the sounds of it silence . . . "Wild Rivers"

"The good life on any river may . . . depend upon the perception of its music, and the preservation of some music to perceive." Aldo Leopold

RESOLUTION

WHEREAS, the citizens of Louisiana and the nation are becoming increasingly aware of the accelerating deterioration of the environment, the pollution of rivers and streams, the desecration of the landscape, the pollution of the air we breathe, the loss of scenic beauty and the loss of historically important landmarks and landscapes.

WHEREAS, the Louisiana Wild Life and Fisheries Commission finds that Louisiana has certain rivers, streams and bayous that possess unique and outstanding scenic, fish, wildlife, geological, botanical, recreational, historical, archaeological and cultural values of both present and potential benefit to the citizens of this state and the nation.

WHEREAS, the Louisiana Wild Life and Fisheries Commission finds that the policy of channelization, channel realignment, clearing and snagging, indiscriminate reservoir construction and the encroachment of urban, commercial and industrial developments needs to be complemented by a program that would preserve, protect and develop the quality of our natural streams and bayous.

WHEREAS, in a state once blessed with thousands of miles of natural, meandering rivers, streams and bayous, the Louisiana Wild Life and Fisheries Commission finds only a few natural free-flowing streams left and therefore feels a strong obligation to the citizens of Louisiana and to future generations to urge the protection and preservation of the few streams or remnants thereof that remain in their natural or scenic state.

NOW THEREFORE BE IT RESOLVED that the Louisiana Wild Life and Fisheries Commission does hereby endorse and support the concept of stream preservation.

BE IT FURTHER RESOLVED that the Louisiana Wild Life and Fisheries Commission does hereby urge and request that the Louisiana Legislature enact the necessary legislation to establish a stream preservation system that would halt the needless destruction of some of the state's few remaining natural rivers and streams in order that these may be enjoyed by future generations.

BE IT FURTHER RESOLVED THAT THE Louisiana Wild Life and Fisheries Commission does hereby recommend to the Governor and to the Louisiana Legislature that the following names of streams, bayous and rivers be considered for purposes of stream preservation:

Enter into the joy of running water . . .
"Wild Rivers"

PUSHEPATAPA CREEK — Washington parish: From the Louisiana-Mississippi state line to its entrance into the Pearl River

PEARL RIVER—Washington & St. Tammany parishes: From the Louisiana-Mississippi state line to its entrance into Lake Pontchartrain

BOGUE CHITTO RIVER — Washington & St. Tammany parishes: From the Louisiana-Mississippi state line to its entrance into the Pearl River

TCHEFUNCTE RIVER — Washington, Tangipahoa, & St. Tammany parishes: From its origin in Tangipahoa parish to its entrance into Lake Pontchartrain

TANGIPAHOA — Tangipahoa parish: From the Louisiana-Mississippi state line to its entrance into Lake Ponchartrain

CHAPPEPEELA CREEK — Tangipahoa parish: From La. Hwy. 1062 to its entrance into Lake Ponchartrain

TICKFAW RIVER—St. Helena & Livingston parishes: From the Louisiana-Mississippi state line to its entrance into Lake Maurepas

AMITE RIVER—East Feliciana & St. Helena parishes: From Louisiana-Mississippi state line to Hwy. 37

COMITE RIVER—East Feliciana & East Baton Rouge parishes: From the Wilson-Clinton Hwy. in East Feliciana parish to Dyer Road in East Baton Rouge parish

THOMPSON CREEK—East Feliciana & West Feliciana parishes: From the Louisiana-Mississippi state line to the entrance of Karr Creek

BAYOU SARA—West Feliciana parish: From the Louisiana-Mississippi state line to its entrance into the Mississippi River

BLIND RIVER—St. James, Ascension, Livingston & St. John parishes: From its origin in St. James parish to its entrance into Lake Maurepas

BAYOU DES ALLEMANDS—Lafourche & St. Charles parishes: From Lac Des Allemands to Lake Salvador

CALCASIEU RIVER—Vernon, Rapides, Allen, Jefferson Davis, & Calcasieu parishes: From its origin in Vernon parish to Hecker in Calcasieu parish

WHISKEY CHITTO CREEK—Allen, Vernon & Beauregard parishes: From its origin in Vernon parish to its entrance into the Calcasieu River

SIX MILE CREEK—Vernon & Allen parishes: From its origin in Vernon parish to its entrance into Whiskey Chitto Creek

TEN MILE CREEK—Vernon & Allen parishes: From its origin in Vernon parish to its entrance into Whiskey Chitto Creek

BAYOU TORO—Sabine & Vernon parishes: From its origin in Sabine parish to its entrance into Sabine River

BECKWITH CREEK—Beauregard & Calcasieu parishes: From its origin in Beauregard parish to its confluence with Hickory Branch

HICKORY BRANCH—Beauregard & Calcasieu parishes: From its origin in Beauregard parish to its confluence with Beckwith Creek

LITTLE RIVER—Rapides, Grant, Catahoula, & LaSalle parishes: From Hwy 165 in Grant and Rapides parishes to its entrance into Catahoula Lake

BIG CREEK—Grant parish: From Hwy 167 in Grant parish to its entrance into Little River

FISH CREEK—Grant parish: From its origin near Williams to its entrance into Little River

TROUT CREEK—La Salle parish: From Hwy B to its entrance into Little River

BAYOU BARTHOLOMEW—Morehouse parish: From the Louisiana-Arkansas state line to Dead Bayou

BAYOU D'ARBONNE—Union & Ouachita parishes: From the Lake D'Arbonne dam to its entrance into the Ouachita River

BAYOU L'OUTRE—Union & Ouachita parishes: From the Louisiana-Arkansas state line to its entrance into the Ouachita River

CORNEY BAYOU—Claiborne, Union, Lincoln parishes: From the Louisiana-Arkansas state line to Corney Lake and Corney Lake Dam to Lake D'Arbonne

MIDDLE FORK—Claiborne & Union parishes: From its origin near Hwy 2 alternate to Lake D'Arbonne

SALINE BAYOU—Bienville, Winn, & Natchitoches parishes: From its origin near Bryceland to Hwy 156 in Winn parish

BLACK LAKE BAYOU—Red River, Winn, Bienville, Webster, & Claiborne parishes: From the Webster-Bienville parish line to Hwy 155 in Natchitoches parish

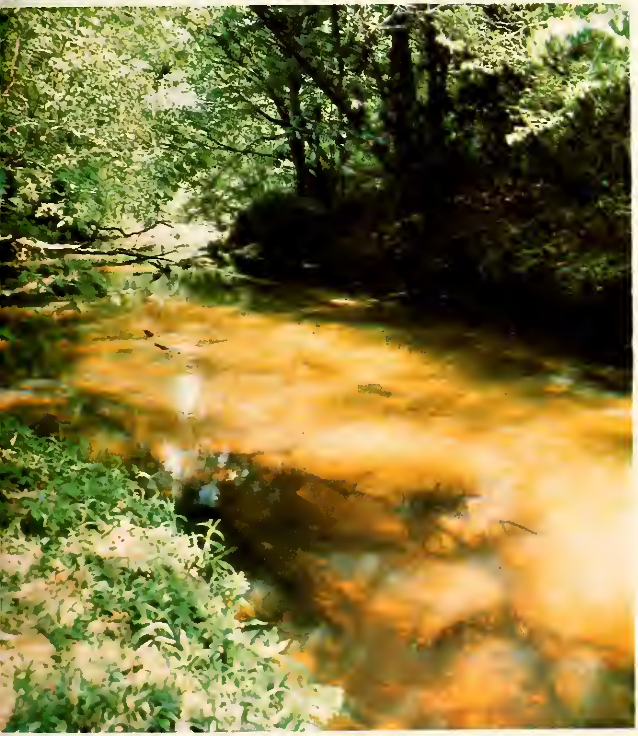
BAYOU DORCHEAT—Webster parish: From the Louisiana-Arkansas state line to Lake Bistineau

BAYOU BODCAU—Bossier & Webster parishes: From the Louisiana-Arkansas state line to Hwy 157 in Bossier parish

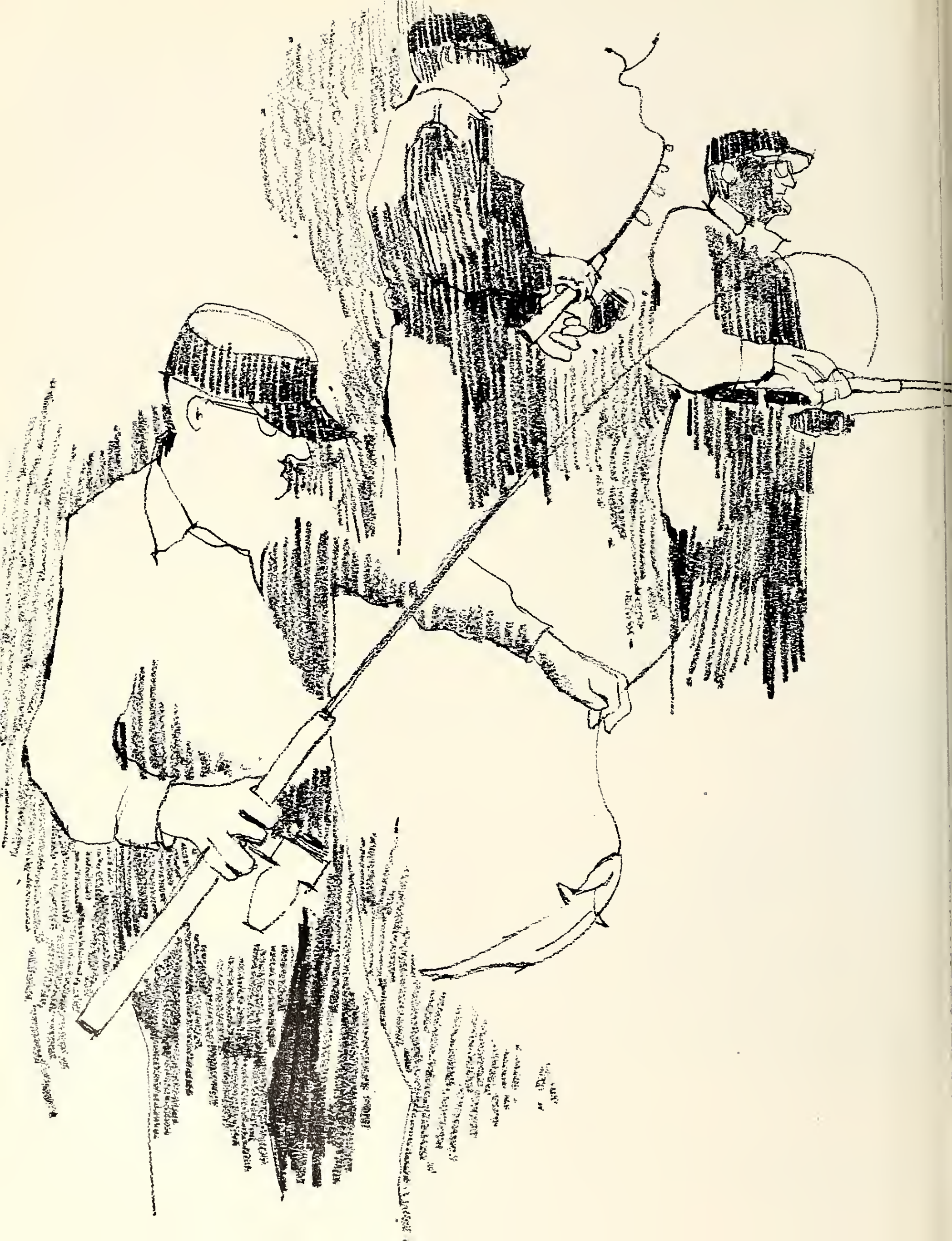
BAYOU KISATCHIE—Natchitoches par-

"When you defile the pleasant streams . . . You massacre a million dreams . . ." John Drinkwater

ish: From its entrance into Kisatchie National Forest to its entrance into Old River
SPRING CREEK—Rapides parish: From Otis to Cocodrie Lake in Rapides parish
SALINE BAYOU—Catahoula & La Salle parishes: From Saline Lake to Larto Lake
BAYOU PENCHANT—Terrebonne parish: From Bayou Chene to its entrance into Lake Penchant
BAYOU COCODRIE—Concordia parish: From Wild Cow Bayou to Little Cross Bayou



"There's no music like a little river's . . . It takes the mind out of doors . . . and . . . sir, it quiets a man down . . . like saying his prayers" . . . Robert Louis Stevenson



SPECKS BEFORE THEIR EYES

STORY & PHOTOGRAPHY
BY McFADDEN DUFFY

This is the season of the year when a great number of fishermen along the Louisiana coast start suffering from an annual malady. It's contagious, but it is not serious. The cure is simple. When fishermen start seeing specks before their eyes, the best thing to do is go fishing.

Speckled trout are probably the most sought after salt water species. They are found in all of the state's coastal bays, lakes, bayous and oil company canals. Probably more angling man hours are spent speckled trout fishing than are devoted to catching any other kind of fish.

Few salt water anglers would recognize the scientific name for the Spotted Sea Trout. They are aware of the fact that they are members of the weakfish family because they know from experience that the mouth tissue is easily torn. Many a speckled trout has been lost because the fisherman tried to "horse it in."

They are best known as speckled trout, and affectionately called specks. Reasons why they are sought by many anglers are simple. The fish are plentiful, often ranging in large schools and providing plenty of action for fishermen.

Average weights run between two and three pounds, with smaller speckled trout being referred to as "school trout." Those running five pounds and better are highly prized by coastal fishermen.

International Game Fish Association records for 1970 reveal that the all time record for speckled trout is 15 pounds, 3 ounces, caught by C. W. Hubbard at Fort Pierce, Florida, January 13, 1949.

The largest speckled trout taken in Louisiana, as shown in the records of the Louisiana Outdoor Writers Association was a 12 pound, 6 ounce fish taken by Leon Mattes in May of 1950.

It is possible that larger speckled trout have been taken commercially but no record exists.

May and June are two of the popular months for speckled trout fishing, although fishing for specks is not a seasonal matter. They are caught the year around, and some speckled trout fishermen prefer the fall months. For dedicated speckled trout fishermen these spotted gray-silver fish distinguished by bright black spots from which the named speckled trout is derived are the quarry of anglers all year.

The months of May and June are particularly attractive ones for coastal anglers because this fine fishing occurs when the transition between winter and summer fishing takes place.

The abundance of redfish starts to diminish in early May and warm weather fish such as big croakers, cobia, king mackerel, flounders, sheepshead and offshore species are just starting to build up in num-

bers. These are really the months when the greatest number of coastal anglers concentrate on speckled trout.

Shrimp are probably the most widely used natural bait, but there is no fixed rule of thumb when it comes to natural baits. Small croakers are a favorite bait with many anglers, as are cockaho minnows. In some areas of southeast Louisiana live river shrimp are used by some fishermen, particularly during the closed season for inside trawling, when live bait supplies are limited.

One reason for the popularity of speckled trout is that they hit artificial lures readily. As is the case in other types of fishing, anglers have their favorites. It would be impossible to list all of the lures that will take speckled trout. There are times when these fish will hit lures considered standard bass lures.

The difference between catching speckled trout consistently and sometimes going home empty handed depends a great deal on knowing likely places where specks can be taken. If a man has a half dozen or so places where he regularly catches speckled trout the chances are that he will connect except during periods of adverse weather. Tides and water conditions make a difference, but some fine fish will be taken.

Just what is it about this fish that sets the pulses of salt water anglers pounding and makes them see specks before their eyes? Those sea trout are not heavyweights. They are better known for tearing loose from a hook than tearing up tackle. About a third of the ones hooked get away.

Yet, when the trout start showing up in coastal waters there are countless hundreds of fishermen who get the urge to take off and seek them. A good session with speckled trout is recommended as a cure for the malady mentioned.

Popularity of the speckled trout dates back to the days when anglers fished them with long bamboo poles from skiffs. This was referred to as "slaughter pole" fishing and when the big specks were schooled up over a reef it was astounding the number of fish that were quickly taken.

Speckled trout were favorites then as now because they are fine fish for the table. Filets from the larger fish can be prepared in many ways. The flesh is white and firm, ideally suited to frying or broiling. When broiled with certain sauces, speckled trout can be a dish for gourmets. When pan fried a golden brown, speckled trout rival the highly prized fresh water catfish.

The same high regard for speckled trout continued into the early years of casting and spinning tackle. These fish are as popular today as they were several generations ago, and it can be truthfully said they are more respected today. That is because light tackle brings out the best fighting qualities in speckled trout.

There are some speckled trout fanciers who'll argue that a three-pound trout is best for the table. They say that the larger trout are not quite as delicately flavored. That might be true although the matter could easily be debated.

One thing that all speckled trout fishermen agree upon is that the bigger the trout, the better the fight. Even school trout do not fool around when it comes to taking a baited hook or a lure. They have never been known to nibble. Sometimes they'll "bump" a baited hook or lure. Usually this can be chalked up to making a pass at the bait or lure but missing it. A twitch of the lure or a movement of the bait will usually bring an instant strike.

Popularity of speckled trout fishing in the surf is growing throughout the pelican state. Grand Isle is the only area where surf fishing can be easily reached by automobile. Best months in the year are from May through October.

Other popular areas include the Chandeleur Islands complex and coastal island boat east and west of Grand Isle. A number of fishermen fly to the Chandeleur Islands to fish for speckles in the surf. Other islands are best reached by boat.

Surf fishing in Louisiana is far different than that practiced on both the Atlantic and Pacific coasts. It calls for little equipment other than a good casting rod, suitable lures, and a stringer on which to put the fish. Most surf fishermen wear old tennis shoes for wading. Clothing needs vary from a pair of old trousers to swimming trunks.

The fisherman wades out until he is about waist deep and starts casting. Speckled trout prowling the surf are usually good size fish. Some surf fishermen prefer to wade back to the beach to land their fish, literally beaching them. Others take a chance and grasp them by hand. The stringer one sees most frequently is a long, sturdy cord with a cork tied to one end. The fish are strung on it and trailed behind the wading angler. Fishermen usually tie the end of the stringer about their waist, allowing freedom of movement.

Spotted sea trout enjoy the same high regard of salt water fishermen as largemouth bass do in fresh water circles. They are plentiful, they put up a good fight on medium to light tackle, and they are well suited for the table. Best of all, perhaps, is the fact they are available to the average fisherman. Most of us are average fishermen.

Magnolia Grandiflora
Louisiana State Flower